

CLAIMS :

1. A tracklight (1, 11, 21) in the form of an elongated tube (2, 22, 32) including:
 - a) a reflector (4, 14, 24) extending along the length of said tube and having angularly disposed portions proximally joined at an apex on an optical axis of symmetry, said angularly disposed portions having distal edges;
 - b) a diffuser (5, 15, 25) extending for the length of said tube and having angularly disposed proximal portions terminating in distal edges engaged with the reflector;
 - c) a lens (7, 17, 27) extending between the distal edges of the diffuser, and separating the reflector from the diffuser; and
 - d) one or more light sources (8) positionable along the length of the tube between the reflector and lens, emitting light through the lens and diffuser, generally perpendicular to the length of the tube.
2. A tracklight according to claim 1 in which the reflector forms a right angle about the apex and the diffuser also forms a right triangle in which the lens is the hypotenuse, whereby the elongated tube is a square or rectangle having two reflective sides and two light transmitting sides that emit light generally perpendicular to the length of the tube.
3. A tracklight according to claim 1 in which the reflector portions are generally arcuate, the diffuser is an arcuate segment, and the lens forms a chord of said diffuser, whereby the elongated tube is a circle or ellipse having a reflective side and a light transmitting side that emits light generally perpendicular to the length of the tube.

4. A tracklight according to claim 1, 2 or 3 in which the lens includes linear prisms biasing transverse light away from or collimated along the plane of a symmetric centerline.
5. A tracklight according to claim 4 in which the biasing lens prisms are reversible.
6. A tracklight according to claim 1, 2 or 3 in which the lens and diffuser form a single clear plastic extrusion.
7. A tracklight according to claim 1, 2 or 3 in which the lens includes light-diffusing means.
- 10 8. A tracklight according to claim 1, 2 or 3 in which the light source (8) is one or more fiber optic light guides receiving light from a remote source and comprising side-emitting optical fibers (8s) or end-emitting fibers having diagonal tips (8d) or conical tips (8c) producing side-emitted light.
9. A tracklight according to claim 8 in which the light guides lights are secured in a proximal end 3p of the tube and extend towards the distal end, or secured at a central point and extend towards both ends.
- 15 10. A tracklight according to claim 1, 2 or 3 in which the light sources are side-emitting lamps, including incandescent, fluorescent, metal halide or light-emitting diodes.
- 20 11. An elongated tracklight system (1, 11, 21) in the form of a tube (2, 22, 32) comprising a light reflector and a light diffuser, said tube enclosing one or more longitudinally-spaced light sources (8, 8a, 8b) emitting light through an elongated lens 7 within the tube, said lens including means 7a, 17a, 27a for biasing light in at least one selected radial direction in a plane transverse to the tube.

12. A tracklight according to claim 11 in which the lens and diffuser are integral.
13. A tracklight according to claim 11 in which the lens is reversible to change the direction of desired light biasing.
- 5 14. A tracklight according to claim 11 in which the light sources are longitudinally movable to vary the relative light intensity at one or more selected longitudinal locations along the tube.

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